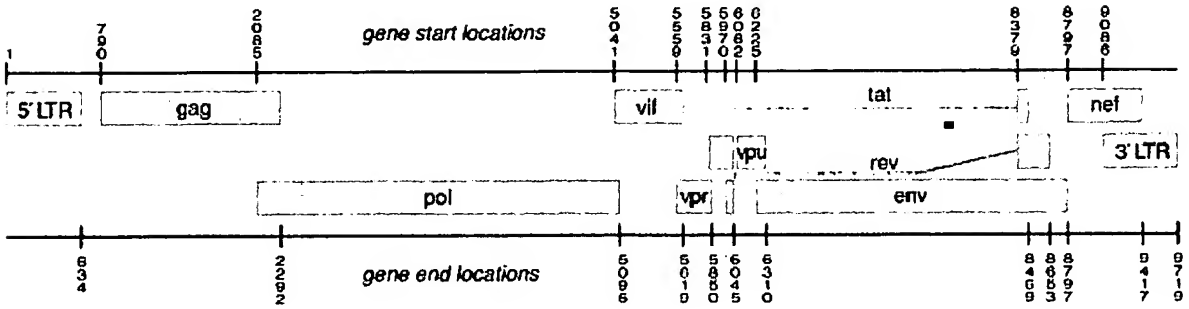
Epilign result

Your query sequence location is shown as a red bar in map between reading frames 1 and 2.



Query: AAGSTMGAASMTLTVQARQ

Query Length: 19

HXB2 Location: Env: 525 → 543 (gp41: 14 → gp41: 32)

Alignment: Env, 979 sequences

Summarize All | Summarize By Subtype

Alignment Results

Search Antibody Database

Found 4 matching records:

Displaying record number 738

MAb ID	5F3	
HXB2 Location	gp160(525-543)	gp160 Epitope Map
Author Location	gp41(526-543 BH10)	
Research Contact	H. Katinger, Inst. Appl. Microbiol., Vienna, Austria	
Epitope	AAGSTMGAASMTLTVQARQ	Epitope Alignment
Ab Type		
Neutralizing	no	
Species (Isotype)	human(IgG1κ)	
Immunogen	HIV-1 infection	
Keywords		

Notes

- 5F3: This epitope is similar to a fragment of the HLA class II histocompatibility antigen, GGSCMAALTVTLTV. *Maksiutov2002*
- 5F3: Human MAb generated by electrofusion of PBL from HIV-1+ volunteers with CB-F7 cells. *Buchacher1994*

References

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Maksiutov2002 A. Z. Maksiutov, A. G. Bachinskii, and S. I. Bazhan. [Searching for Local Similarities Between HIV-1 and Human Proteins. Application to Vaccines]. *Mol Biol (Mosk)*, 36(3):447-459, May-Jun 2002. Article in Russian. PubMed ID: 12068630. Show all entries for this paper.

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MAb ID	25C2 (IAM 41-25C2)	
HXB2 Location	gp160(525-543)	gp160 Epitope Map
Author Location	gp41(526-543 BH10)	

Research Contact	H. Katinger, Inst. Appl. Microbiol., Vienna, Austria and Viral Testing Systems, Houston, TX
Epitope	AAGSTMGAASMTLTVQARQ Epitope Alignment
Ab Type	
Neutralizing	no
Species (Isotype)	human(IgG1κ)
Immunogen	HIV-1 infection
Keywords	

Notes

- 25C2: This epitope is similar to a fragment of the HLA class II histocompatibility antigen, GGSCMAALTVTLTV. *Maksiutov2002*
- 25C2: Called IAM 41-25C2 -- Binding domain overlaps sites that are critical for gp120-gp41 association -- binding is enhanced by sCD4 -- binding region defined as: gp41(21-38 BH10). *Sattentau1995*
- 25C2: Human MAb generated by electrofusion of PBL from HIV-1+ volunteers with CB-F7 cells -- binds oligomeric and monomeric gp41, and gp160. *Buchacher1994*

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Displaying record number 740

MAb ID	24G3
HXB2 Location	gp160(525-543) gp160 Epitope Map
Author Location	gp41(526-543 BH10)
Research Contact	H. Katinger, Inst. Appl. Microbiol., Vienna, Austria
Epitope	AAGSTMGAASMTLTVQARQ Epitope Alignment
Ab Type	
Neutralizing	no

Species (Isotype)	human(IgG1κ)
Immunogen	HIV-1 infection
Keywords	

Notes

- 24G3: This epitope is similar to a fragment of the HLA class II histocompatibility antigen, GGSCMAALTVTLTV. *Maksiutov2002*
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MAb ID	1A1	
HXB2 Location	gp160(525-543)	gp160 Epitope Map
Author Location	gp41(526-543 BH10)	
Research Contact	H. Katinger, Inst. Appl. Microbiol., Vienna, Austria	
Epitope	AAGSTMGAASMTLTVQARQ	Epitope Alignment
Ab Type		
Neutralizing	no	
Species (Isotype)	human(IgG1κ)	
Immunogen	HIV-1 infection	
Keywords		

Notes

- 1A1: This epitope is similar to a fragment of the HLA class II histocompatibility antigen, GGSCMAALTVTLTV. *Maksiutov2002*
- 1A1: Human MAb generated using EBV transformation of PBL from HIV-1+ volunteers. *Buchacher1994*

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HXB2 Location	gp160(525-543)	gp160 Epitope Map
Author Location	gp41(526-543 BH10)	

Research Contact	H. Katinger, Inst. Appl. Microbiol., Vienna, Austria and Viral Testing Systems, Houston, TX	
Epitope	AAGSTMGAASMTLTVQARQ	Epitope Alignment
Ab Type		
Neutralizing	no	
Species (Isotype)	human(IgG1κ)	
Immunogen	HIV-1 infection	
Keywords		

Notes

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MAb ID	24G3	
HXB2 Location	gp160(525-543)	gp160 Epitope Map
Author Location	gp41(526-543 BH10)	
Research Contact	H. Katinger, Inst. Appl. Microbiol., Vienna, Austria	
Epitope	AAGSTMGAASMTLTVQARQ	Epitope Alignment
Ab Type		
Neutralizing	no	

Species (Isotype)	human(IgG1κ)
Immunogen	HIV-1 infection
Keywords	

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MAb ID	1A1	
HXB2 Location	gp160(525-543)	gp160 Epitope Map
Author Location	gp41(526-543 BH10)	
Research Contact	H. Katinger, Inst. Appl. Microbiol., Vienna, Austria	
Epitope	AAGSTMGAASMTLTVQARQ	Epitope Alignment
Ab Type		
Neutralizing	no	
Species (Isotype)	human(IgG1κ)	
Immunogen	HIV-1 infection	
Keywords		

Notes

- 1A1: This epitope is similar to a fragment of the HLA class II histocompatibility antigen, GGSCMAALTVTLTV. *Maksiutov2002*
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<211> LENGTH: 20
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Description of Artificial Sequence: primer
<400> SEQUENCE: 35
agcagcagga agcactatgg 20

A GCA GCA GGA AGC ACT ATG G

A A G S T M

Translation results

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>seq1 (+1)
SSRKHYX
>seq1 (+2)
XAAGSTMX
>seq1 (+3)
XQQEALW

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Translation results

Download this translation

```
>seq1
SSRKHYX
>seq1
XAAGSTMX
>seq1
XQQEALW
```

Questions or comments? Contact us at seq-info@lanl.gov

determination of the DNA concentration at 260 nm in a spectrophotometer (Beckman), sequenced by the Sanger method (F. Sanger, Proc. Natl. Acad,. Sci., 74: 5463, 1977). Instead of sequencing with Klenow DNA polymerase, the sequencing reaction was carried out using a kit from Applied Biosystems ("Taq dye deoxy terminator cycle sequencing", order No.: 401150). Primer 1 (SEQ ID NO:35) or primer 2 (SEQ ID NO:36) (in each case 1 μM) was employed as primers in separate sequencing reactions. The sequencing reaction was analysed on a 373A DNA sequencing apparatus (Applied Biosystems) in accordance with the instructions of the apparatus manufacturer.

[064] The nucleotide sequence of the amplified DNA region, and the amino acid sequence deduced from it, are presented in Table 1. Table 1 includes the DNA sequences SEQ ID NO:37 and SEQ ID NO:38, as well as amino acid SEQ ID NO:39. The top line in Table 1 corresponds to SEQ ID NO:37, the middle line corresponds to SEQ ID NO:38, and the bottom line corresponds to the amino acid SEQ ID NO:39.

[065] Table 1:

```
GCGCAGCGGCAACAGCGCTGACGGTACGGACCCACAGTGTACTGAAGGGTATAGTGCAAC
---------+--------+--------+--------+--------+--------+---------+
CGCGTCGCCGTTGTCGCGACTGCCATGCCTGGGTGTCACATGACTTCCCATATCACGTTG
  A   A   A   T   A   L   T   V   R   T   H   S   V   L   K   G   I   V   Q   Q

AGCAGGACAACCTGCTGAGAGCGATACAGGCCCAGCAACACTTGCTGAGGTTATCTGTAT
--------+-------+--------+--------+----+----+--------+---------+
TCGTCCTGTTGGACGACTCTCGCTATGTCCGGGTCGTTGTGAACGACTCCAATAGACATA
  Q   D   N   L   L   R   A   I   Q   A   Q   Q   H   L   L   R   L   S   V   W
```

infected with MVP-5180/91 (SEQ ID NO:56) were pipetted into a 100 µl reaction mixture (0.25 mM dNTP, in each case 1 µm primer 1 and primer 2, 10 mM Tris HCl, pH 8.3, 50 mM KCl, 1.5 $MgCl_2$, 0.001% gelatin, 2.5 units of Taq polymerase (Perkin Elmer)), and amplification was then carried out in accordance with the following temperature program: 1. initial denaturation: 3' 95°C, 2. amplification: 90" 94°C, 60" 56°C, 90", 72°C (30 cycles).

[062] The primers used for the PCR and for nucleotide sequencing were synthesized on a Biosearch 8750 oligonucleotide synthesizer.

Primer 1 (SEQ ID NO:35): AGC AGC AGG AAG CAC TAT GG (coordinates from HIV-1 isolate HXB2: bases 7795-7814, corresponds to primer sk 68) (SEQ ID NO:21)

Primer 2 (SEQ ID NO:36): GAG TTT TCC AGA GCA ACC CC (coordinates from HIV-1 isolate HXB2: bases 8003-8022, corresponds to primer env b (SEQ ID NO:20).

[063] The amplified DNA was fractionated on a 3% "Nusieve" agarose gel (from Biozyme) and the amplified fragment was then cut out and an equal volume of buffer (1 * TBE (0.09 M Tris borate, 0.002 M EDTA, pH 8.0) was added to it. After incubating the DNA/agarose mixture at 70°C for 10 minutes, and subsequently extracting with phenol, the DNA was precipitated from the aqueous phase by adding 1/10 vol of 3 M NaAc, pH 5.5, and 2 vol of ethanol and storing at -20°C for 15', and then subsequently pelleted in a centrifuge (Eppendorf) (13,000 rpm, 10', 4°C). The pelleted DNA was dried and taken up in water, and then, after photometric

US005156949A

United States Patent [19]

Luciw et al.

[11] Patent Number: 5,156,949

[45] Date of Patent: Oct. 20, 1992

[54] IMMUNOASSAYS FOR ANTIBODY TO HUMAN IMMUNODEFICIENCY VIRUS USING RECOMBINANT ANTIGENS

[75] Inventors: Paul A. Luciw, Davis; Dino Dina, San Francisco, both of Calif.

[73] Assignee: Chiron Corporation, Emeryville, Calif.

[21] Appl. No.: 138,894

[22] Filed: Dec. 24, 1987

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 773,447, Sep. 6, 1985, abandoned, which is a continuation-in-part of Ser. No. 696,534, Jan. 30, 1985, abandoned, which is a continuation-in-part of Ser. No. 667,501, Oct. 31, 1984, abandoned.

[51] Int. Cl.[5] G01N 33/53; C12P 21/06; C12N 15/00; C12N 1/20

[52] U.S. Cl. 435/5; 435/7.2; 435/69.1; 435/172.3; 435/252.33; 435/810; 435/820; 435/974; 935/60; 935/66; 935/69; 935/71

[58] Field of Search 435/5, 7, 68, 172.3, 435/235-239, 810, 820, 948, 69.1, 974; 935/60, 81, 66, 69, 71

[56] References Cited

U.S. PATENT DOCUMENTS

4,520,113	5/1985	Gallo et al.	
4,708,818	11/1987	Montagnier	435/5
4,716,102	12/1987	Levy	435/5
4,725,669	2/1988	Essex et al.	530/395
4,751,180	6/1988	Cousens et al.	435/255

FOREIGN PATENT DOCUMENTS

136798	4/1985	European Pat. Off. .
138667	4/1985	European Pat. Off. .
0139216	5/1985	European Pat. Off. .
0152030	8/1985	European Pat. Off. .
165120	12/1985	European Pat. Off. .
173529	3/1986	European Pat. Off. .
178978	4/1986	European Pat. Off. .
181150	5/1986	European Pat. Off. .
185444	6/1986	European Pat. Off. .
8504897	11/1985	PCT Int'l Appl. .
8504903	11/1985	PCT Int'l Appl. .
8602383	4/1986	World Int. Prop. O. .

OTHER PUBLICATIONS

Wain-Hobson, S. *AIDS 3*(Suppl 1): S13-S18 (1989).
Fenyo, E. M. et al. *AIDS 3*(Suppl 1):S5-S12 (1989).
Meyerhans, A. et al. *Cell 58*:901-910 (Sep. 8, 1989).
Popovic et al., Science 24:497-500 (May 4, 1984).
Barre-Sinoussi et al., May 20 (1983) Science 220:868-871.
Saxinger et al., (1983) Laboratory Investigation 49:371-377.
Gallo et al., (May 4, 1984) Science 224:497-504.
Schupbach et al., (May 4, 1984) Science 224:607-609.
Sarngadharan et al., (May 4, 1984) Science 224:506-508.
Safai et al., (Jun. 30, 1984) Lancet, pp. 1438-1440.
Shaw et al. in *AIDS: Papers from Science, 1982-1985*, pp. 356-268 (R. Kulstad ed. 1986).
Looney et al., Science 241:357-359 (1988).
Culliton in *AIDS: Papers from Science, 1982-1985*, pp. 266-277 (R. Kulstad ed. 1986).
Gurgo et al., Virology 164:531-536.

(List continued on next page.)

Primary Examiner—Christine M. Nucker
Assistant Examiner—M. P. Woodward
Attorney, Agent, or Firm—Robert P. Blackburn; Barbara G. McClung; Debra A. Shetka

[57] **ABSTRACT**

Polynucleotide sequences are provided for the diagnosis of the presence of retroviral infection in a human host associated with lymphadenopathy syndrome and/or acquired immune deficiency syndrome, for expression of polypeptides and use of the polypeptides to prepare antibodies, where both the polypeptides and antibodies may be employed as diagnostic reagents or in therapy, e.g., vaccines and passive immunization. The sequences provide detection of the viral infectious agents associated with the indicated syndromes and can be used for expression of antigenic polypeptides.

22 Claims, 59 Drawing Sheets